ends; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said optical fiber; a detection device comprising: (a) a light emitting source; (b) a housing for engaging the other end of said fiber to said light source; (c) a photo detector to receive light reflected off the reagent pad end of said fiber; (d) a processor to convert the light signal to the analyte concentration, and (e) a display to display the test results.

- 28. The device of claim 27, wherein the test tip is disposable.
- 29. The device of claim 27, wherein the reagent pad is a membrane impregnated with dry chemicals and enzymes.
- 30. The device of claim 27, wherein said reagent pad is a cast membrane which contains all the required chemicals and enzymes for a specified analysis.
- 31. The device of claim 27, wherein said optical fiber is made of glass/glass, or plastic/plastic, or glass/plastic.
- 32. A tubular test tip device for measuring an analyte in a sample comprising: an elongated piece of micro plastic tubing with two ends of equal size; a reagent pad containing all the necessary chemicals and enzymes for a specified analysis; said reagent pad being mounted to one end of said tubing; a detection device comprising: (a) a light emitting source; (b) an elongated, non-air, fiber optic probe with two ends of equal size to transmit light, (c) a photo